

Notice of Allowability

Application No.

10/007,840

Examiner

Jamal A. Fox

Applicant(s)

NGUYEN ET AL.

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/28/2005.
2. ☒ The allowed claim(s) is/are 1-13 and 16-20, which have been renumbered as 1-18 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Interview Summary (PTO-413), Paper No./Mail Date 11232005
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-13 and 16-20, which have been renumbered as 1-18 respectively, are allowed.
2. The following is an examiner's statement of reasons for allowance: Regarding claims 1-18, the prior art of record fails to teach of if one or more request signals include a request signal from a component of the second type: receiving assertions of hold acknowledge signals from each of the components of the first type; asserting a grant signal to a selected component of the second type after receiving the hold acknowledge signal assertions; and where the components of the first type assert each assert a respective hold acknowledge signal in response to assertion of the hold signal, and where any component of the first type that is actively accessing the XPORT delays assertion of the hold acknowledge signal until said accessing is completed. The closest reference, Walsh et al. (U.S. Patent No. 5,848,253), teaches of providing access to a limited resource in a digital signal processing system by receiving one or more request signals from a set of components of two distinct type; responsively asserting a grant signal to a selected component of a first type if the one or more request signals are each from components of the first type; and responsively asserting a hold signal to each component of the first type if the one or more request signals include a request signal from a component of the second type, but fails to teach of if the one or more request signals include a request signal from a component of the second type: receiving assertions of hold acknowledge signals from each of the components of the first type;

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asserting a grant signal to a selected component of the second type after receiving the hold acknowledge signal assertions; and where the components of the first type assert each assert a respective hold acknowledge signal in response to assertion of the hold signal, and where any component of the first type that is actively accessing the XPORT delays assertion of the hold acknowledge signal until said accessing is completed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert D. Marshall, Jr. on 11/23/2005.

Replace the Abstract filed on 11/8/2001 with the following Abstract:

ABSTRACT

A digital signal processing system includes multiple processor subsystems, an external input/output port (XPORT), and an XPORT arbiter. The processor subsystems each include a processor core and a DMA controller. The XPORT arbiter arbitrates between the processor cores and between the DMA controllers, and further arbitrates between processor control or DMA control of the XPORT. Upon a request signal from a DMA controller, the XPORT arbiter asserts a hold signal to the processor cores. The processor cores respond by asserting a hold acknowledge signal. A processor core will delay the hold acknowledge signal until through with the XPORT. The arbiter, then asserts a grant signal to the DMA controller requesting access. The arbiter may assert a grant signal to a processor core requesting access. However, the processor core's access will be stalled as long as the hold signal is asserted.

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Conclusion

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-3143. The examiner can normally be reached on Monday-Friday 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to 2600 Customer Service whose telephone number is (571) 272-2600.



Jamal A. Fox

WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER